

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in this application:

Listing of Claims:

1. (Previously Presented)

Magnetic separator with permanent magnets comprising:
a ferromagnetic member (2);
at least two distinct magnetic poles (3C), each a magnetic pole located on said ferromagnetic member (2) and in circuit connection with said ferromagnetic member;
wherein each distinct magnetic pole (3C) comprises ferrite magnets (12) in the bottom portion in contact with said ferromagnetic member (2) for the circuit connection, and of rare earth magnets (13) in the top to provide a distinct entrance/exit surface (14, 16) of magnetic flux lines (15), wherein in each magnetic pole (3C) the ratio between the effective magnetic length of the ferrite magnets (12) and of the rare earth magnets (13) is between 1:1 and 3:1.

2. (Cancelled)

3. (Currently Amended)

Magnetic separator according to Claim 1 or 9, characterized in that it consists of a ferromagnetic cylinder (2) around which there are applied the magnetic poles (3C), said cylinder (2) being enclosed by a protective casing (4) of non-magnetic material filled with a blocking resin (5), this assembly being secured onto a shaft so that it can be used for a conveyor (6) on which the material (8) to be treated is drawn.

4. (Currently Amended)

Magnetic separator according to Claim 1 or 9, characterized in that the ferrite magnets

(12) are made of barium ferrite or strontium ferrite.

5. (Currently Amended)

Magnetic separator according to Claim 1 or 9, characterized in that the rare earth magnets

(13) are made of samarium-cobalt or iron-boron-neodymium.

6. (Previously Presented)

Magnetic separator according to Claim 3, characterized in that the ferrite magnets (12) are made of barium ferrite or strontium ferrite.

7. (Previously Presented)

Magnetic separator according to Claim 3, characterized in that the rare earth magnets (13) are made of samarium-cobalt or iron-boron-neodymium.

8. (Previously Presented)

Magnetic separator according to Claim 4, characterized in that the rare earth magnets (13) are made of samarium-cobalt or iron-boron-neodymium.

9. (Previously Presented)

Magnetic separator according to Claim 1, characterized in that in each magnetic pole (3C) the ratio between the effective magnetic length of the ferrite magnets (12) and of the rare earth magnets (13) is 2:1.